4CH STANDALONE DVR
四路單機數位錄影系統

USER MANUAL

2005 SEP.

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1、FEATURE

1、Definitely Standalone.

2、Real Time Refresh Rate.

3、Display While Recording.

4、Frame Recording & Quad Recording.

5、Compatible of NTSC/PAL format.

6、Advanced MJPEG.

7、Manual / Motion / Programmed / Sensor Recording.

8、4 Sensor by Time / Date.

9、Search by Time / Date.

10、Watch dog feature.

11、HDD Volume Indicator.

12、Can use USB to link PC, Player can search Time to Play、saving and take photos functions.

13、Internal motion detect feature.

14、Auto switching function.

15、Looping Output.

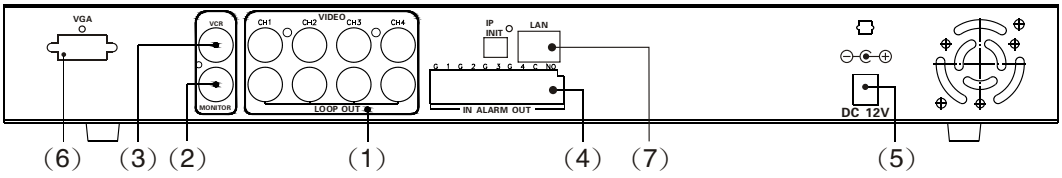
16. Keypad Lock-up function.

2、SPECIFICATIONS

OPERATION SYSTEM	Embedded RTOS		
Video Input	NTSC/PAL		
Video Input Channel	4CH Composite		
Video Output Channel	2CH Composite (VCR OUT / MONITOR OUT)		
Display Frame	NTSC	120 fps (4x30 fps)	
	PAL	100 fps (4x25 fps)	
Recording Frame Rate(QUAD)	NTSC	Max. 30 fps	
	PAL	Max. 25 fps	
Recording Frame Rate(EACH)	NTSC	Max. 7.5fps(30 fps/4)	
	PAL	Max. 6.25fps(25 fps/4)	
Recording Mode	Continuous / Motion / Programmed/Sensor		
Resolution	Display	NTSC	720x480
		PAL	720 x 576
	Recording	NTSC	640x224
		PAL	640x272
Compression Format	Advanced MJPEG	Low	12K Bytes / Frame
		Normal	15K Bytes / Frame
		High	20K Bytes / Frame
HDD	400G X 2 (Max)		
Backup Device	VCR		
Search	Mode	Time / Date / Event	
	Full screen	YES	
Sensor	4 Input / 1 Output		
MOTION DETECT	YES		
LOSS DETECT	YES		
AUTO SWITCHING	YES		
BUZZER OUTPUT	YES		
Brightness adjust	YES		
Contrast adjust	YES		
USB Output	YES		
Looping Output	YES		
Keypad Lock-up	YES		
System a monitor	Power recover auto restore record mode		
Power supply	DC 12V / 4A(AC110V–240V 50/60HZ)		
Dimension	430mm x 300mm x 48mm (W x D x H)		
Weight	3.5KG		
LAN	10/100M		

3、INSTALLATION

REAR PANEL



(1) Cameras Video Input and Looping Output.

(2) Video Output : Corresponding to Monitor Video Input.

(3) Video Output : Corresponding to VCR Video Input.

(4) Sensor I / O：

1、Sensor Input of Camera #1

2、Sensor GND of Camera #1

3、Sensor Input of Camera #2

4、Sensor GND of Camera #2

5、Sensor Input of Camera #3

6、Sensor GND of Camera #3

7、Sensor Input of Camera #4

8、Sensor GND of Camera #4

9、Relay COM Output

10、Relay N/O Output

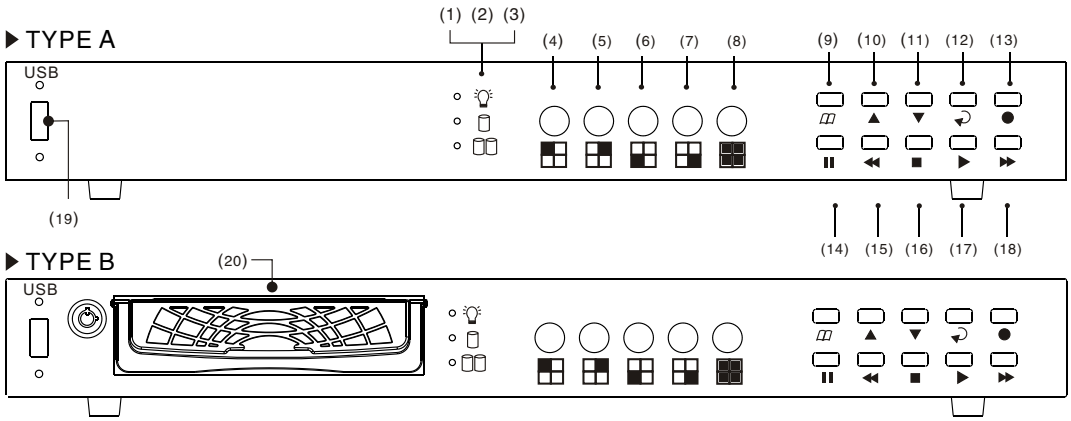
(5)Power Input : Please use the power supply attached

Adaptor : DC–12V / 4A

(6) VGA Output : Connect to VGA Monter (option)

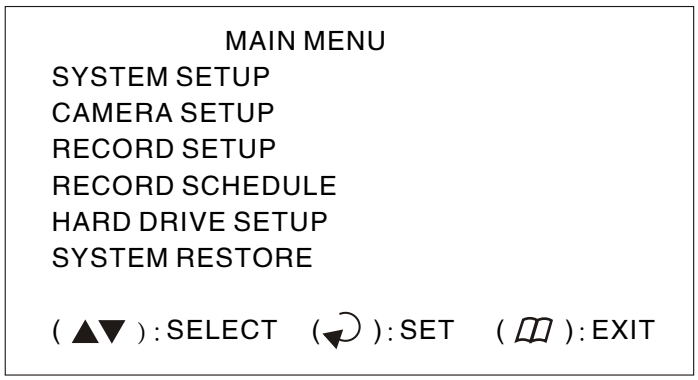
(7)Ethernet RJ–45 (option)

4、FRONT PANEL



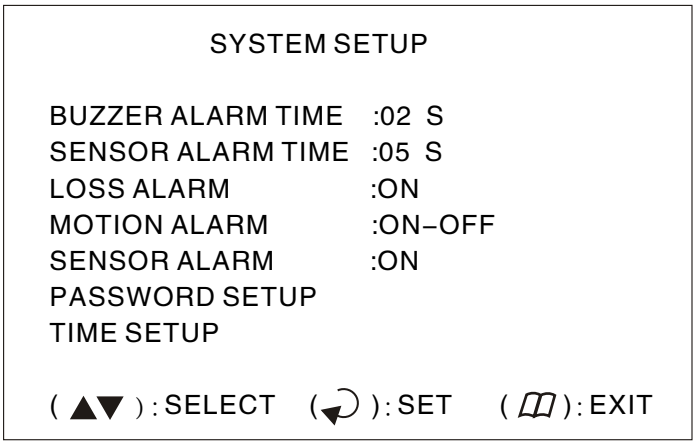
(1) Record Indicator
(2) HDD #1 Indicator
(3) HDD #2 Indicator
(4) Camera #1 Display (Ch1)
(5) Camera #2 Display (Ch2)
(6) Camera #3 Display (Ch3)
(7) Camera #4 Display (Ch4)
(8) Quad Display (QUAD)、AUTO SWITCHING
(9) MENU, Percentage of the Hard Drive recorded
(10) ▲ UP
(11) ▼ DOWN
(12) SELECT
(13) ● RECORD
(14) ❚❚ PAUSE, Keypad Lock–up
(15) ◀◀ RF
(16) ■ STOP
(17) ▶ PLAY
(18) ▶▶ FF
(19) USB Port
(20) HDD RACK (TYPE B)

5、OPERATING MANUAL(MAIN MENU)



Press ▲▼ to select items, use to enter.
Press to exit

5–1 、SYSTEM SETUP



(1)Buzzer Alarm Time Setup: 1–30 sec.
(2)Sensor Alarm Time Setup: 0–30 sec, CONT (Continue).
(3)Loss, Motion, Sensor Alarm：ON/OFF.
(4) Motion Alarm：ON–OFF(4 Type) ,front is Alarm, behind is jump to alarm a picture.

5–1–1 、PASSWORD SETUP

Select this item to change password :

```
OLD PASSWORD      :______
NEW PASSWORD      :______
PASSWORD CONFIRM  :______
```

(1) When the new password is accepted, the board will flash the following screen message.
" PASSWORD CHANGING "

(2) If the password was not accepted, you will receive a message that inform you.
" INCORRECT "

*Use the view control button on the front panel to input the umber.

is: "1" is: "2" is: "3" is: "4" is: "5"

5–1–2 、TIME SETUP

Select this item to set up current time.

```
TIME SET

2004/12/17 18:00:30
SHOW : UP 1

( ▲▼ ) : SELECT  ( ↵ ) : SET  ( 🕮 ) : EXIT
```

*Press ▲▼ to setup time. Use ↵ to increase value.
Press 🕮 to exit and to save data.

Show Time setup:
UP 1 : Displayed on up–right corner of screen, date & time listed in a rows.
UP 2 : Displayed on up–right corner of screen, date & time listed in two rows.
DOWN1 : Displayed on down–right corner of screen, date & time listed in a rows.
DOWN2 : Displayed on down–right corner of screen, date & time listed in two rows.

5–2 、CAMERA SETUP

CAMERA SETUP

CAMERA	:CH1
RECORD SETUP	:ON
BRI SETUP	:05
CON SETUP	:05
SENSOR SETUP	:N–O
MOTION SETUP	:ON
SENSITIVITY SETUP	:05
AUTO SWITCHING	:05 S

(▲▼) : SELECT (↵) : SET (⏎) : EXIT

Press ▲▼ to select items. Use ↵ to change data.
Press ⏎ to exit and to save data.

(1)Camera select (default value Ch1).
(2)Record Set up : yes or no record.
(3)Brightness / Contrast Set up : default value is 5.
(4)Sensor Setup: Three items, N–O (normal–open),
N–C(normal–close), ––––(not installed).
(5)Motion Set up : motion detector, ON/OFF.
(6)Sensitivity Set up : sensitivity setup of motion detector.
(7) AUTO SWITCHING : Switching time set up.

5–3 、RECORD SETUP

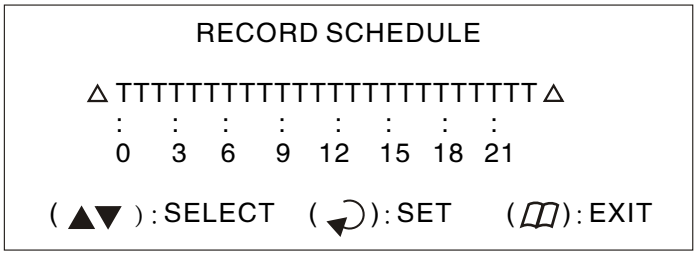
RECORD SET

RECORD SETUP	:EACH MODE
VIDEO QUALITY	:NORMAL
RECORD FRAME RATE	:30 fps
SENSOR REC. FRAME RATE	:15 fps
SENSOR RECORD TIME	:05 SEC

(▲▼) : SELECT (↵) : SET (⏎) : EXIT

(1) Record Setup:EACH MODE (frame recording),
QUAD MODE (quad recording).
(2) Video Quality: video quality selection: High, Normal, Low
(3) Record Frame Rate: QUAD MODE frame rate alternatives as follows:
→30、20、15、10、7.5、6、5、4、3、2、1 fps.
→In this mode 、 、 、 invalid.
Each Mode frame rate alternatives as follows:
→Maximum : 7.5 fps each camera Totally :30 fps = 7.5 x 4 CH
(4) Video Quality: video quality selection: High, Normal, Low
(5) Sensor Record Time : maximum 60 seconds sensor recording time.
※(4)(5) Record Schedule only valid in “S” selection.

5–4、RECORD SCHEDULE



Press ▲▼ to select items. Use to change record mode.
Press to exit and to save data

(1)Use to change record mode.
(2)Range: 0–24 hrs.
(3)Set “T” for continuous recording.
(4)Set “S” for sensor recording. Please refer to 5–3 sensor setup.
(5)Set up “–” to disable the record time.

5–5、 HARD DRIVE SETUP

HARD DRIVE SETUP	
OVERWRITE ENABLED	(YES)
MASTER HDD SIZE	80000MB
MASTER HDD USED	0MB0 %
MASTER HDD FORMAT	
SLAVE HDD SIZE	N/A
SLAVE HDD USED	N/A
SLAVE HDD FORMAT	
(▲▼) : SELECT	( ) : SET ( ) : EXIT

Press ▲▼ to select items. Use to change data or to execute function. Press to exit and to save data.

(1)Overwrite Enabled

YES : Overwrite.

NO : Stop Recording.

(2)Master HDD Status

Indicates use of the master HDD including volume & percentage

(3)Master Format

Select this item to format HDD, screen show:

PASSWORD INPUT (6) –––––– 6 digits.

If password correct, the screen shows : “ password correct “

Otherwise, it shows: “ password incorrect “

* Factory default password:111111
* HDD must be formatted before installation, replacement & re–installation.

5–6、SYSTEM RESTORE

System Restore default value.

6、VIEW CONTROL

(1)Can use the following view control to monitor images from cameras.

Camera #1 (Ch1)　　Camera #2 (CH2)

Camera #3 (Ch3)　　Camera #4 (CH4)

QUAD Display,Auto switching function.

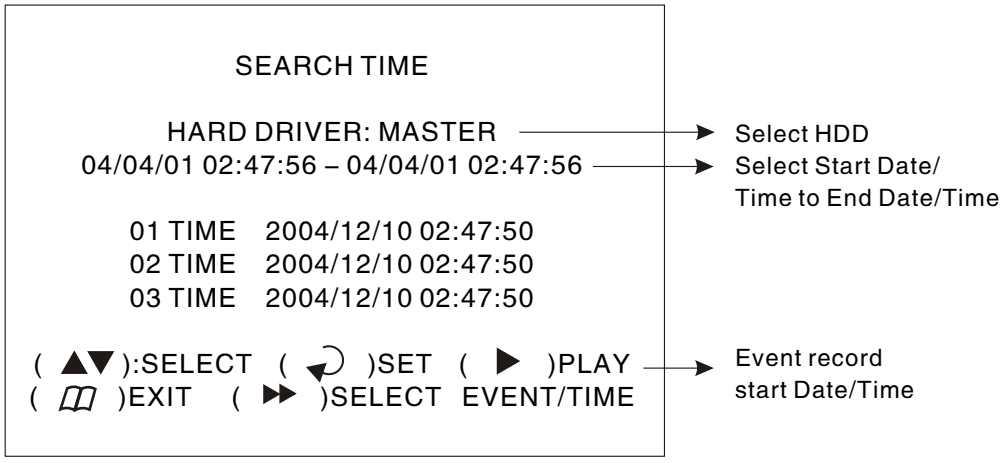
(2)Prior to view control, HDD must be formatted. Either "EACH MODE" or "QUAD MODE" should be selected. (Refer to 5–3)

(3)In mode of "QUAD MODE", view control is only for quad display not available for CH1, CH2, CH3, Ch4

7、PLAYBACK CONTROL

(1)Press ▶, and the system shows the recorded period.

(2)Each period is as four hour



Press ▶▶ to select EVENT or DATE / TIME , Press 🕮 to exit.

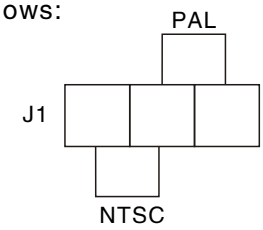
(1)EVENT :
Press ▲▼ choose one period, then press ▶ to play.
(2)DATE / TIME :
The signal ”>” goes up to the “HARD DRIVER: MASTER”. Press ▲▼ to select items. Use ↩ select to change data, Then press ▶ to play.
(3)PLAYBACK :
*Press ▶▶ to speed forward. Continue to press ▶▶ and show x2、x4、x8 multiple playing.
*Press ◀◀ to show x2 multiple back motion.
*Press ❚❚ to pause.
*Press ■ to stop.

8、RECORD CONTROL

(1)Press ● to start recording.
White ○ indicates recording.
(2) During recording, the mark ” * ” appears in status of overwriting

9、NTSC / PAL SYSTEM SETUP

(1) Replace the jumper to change system.
(2) J1 as follows:



10.Keypad Lock–up Setup:

Strike the button "pause" five times continually, "L" pops up on the left, to enable . Keypad lock–up feature.
Strike the button "pause" five times again, "L" not found, to unlock keypad.

11 . 4CH Recording Hours on 80GB Hard Drive

*Thereinafter a rough estimate a table for reference only, recording data quantity can follow an image a variation a rate somewhat different.

Recording Results in NTSC Format			30 fps	15 fps	7 fps	1 fps
Video Signal	Display Format	Video Quality				
NTSC	QUAD MODE	High	36Hours	72 Hours	144 Hours	1,080 Hours
		Normal	48 Hours	96 Hours	192 Hours	1,440 Hours
		Basic	58 Hours	116 Hours	232 Hours	1,740 Hours
	EACH MODE (Full Screen)	High	64 Hours	128 Hours	256 Hours	1,920 Hours
		Normal	90 Hours	180 Hours	360 Hours	2,700 Hours
		Basic	112 Hours	224 Hours	448 Hours	3,360 Hours
Recording Results in PAL Format			25 fps	12 fps	6 fps	1 fps
Video Signal	Display Format	Video Quality				
PAL	QUAD MODE	High	38 Hours	76 Hours	152 Hours	950 Hours
		Normal	48 Hours	96 Hours	192 Hours	1,200 Hours
		Basic	60 Hours	120 Hours	240 Hours	1,500 Hours
	EACH MODE (Full Screen)	High	62 Hours	124 Hours	248 Hours	1,550 Hours
		Normal	90 Hours	180 Hours	360 Hours	2,250 Hours
		Basic	118 Hours	236 Hours	472 Hours	2,950 Hours

12.DVR Viewer User Guide Revision V1.0.N.EN

Introduction

This document is the Operation Manual for DVR Viewer. The application will show you stream image stored in the HDD which was previously formatted and recorded by the DVR.

If any DVR HDD is connected to your PC, the application will automatically detect the HDD and show the recorded stream. You can also save the current screen to a BMP file, and save the current stream to a MYS stream file or an AVI file.

The application consists of two functional modules:

◆ DVR HDD PC Viewer	Shows stream stored in the HDD directly.
◆ MYS File Player	Plays captured stream MYS file.

Document History

◆ V1.0

Requirement

◆ OS	Windows 2000 / XP or later
◆ DirectX	DirectX 7.0 or later

Recommendation

◆ CPU	1.0 GHz or Higher
◆ RAM	256 MB or Greater

Installation

Hardware Installation

As stated above, the application shows stream which is stored in DVR HDD.

Before installing and executing the application, make sure that you connected DVR HDD to the IDE cable of your PC directly, or via USB HDD adaptor

Software Installation

Make sure that the OS of your PC is Windows 2000 or later [XP or 2003]. Otherwise, the application will not operate properly. Double click on the DVR_Setup.exe to install the program.

Execution

Just double click the shortcut of the execution file. The application first detects physical HDDs installed at your PC and search for DVR HDD among them. This process may take up to 1 minute.

DVR Viewer

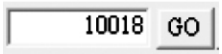
User Interface

Functions

Valid Stream Region Indication

Once a DVR HDD is selected, the application detects valid stream region where valid video stream resides. You can drag this to access the whole streams of the DVR HDD.

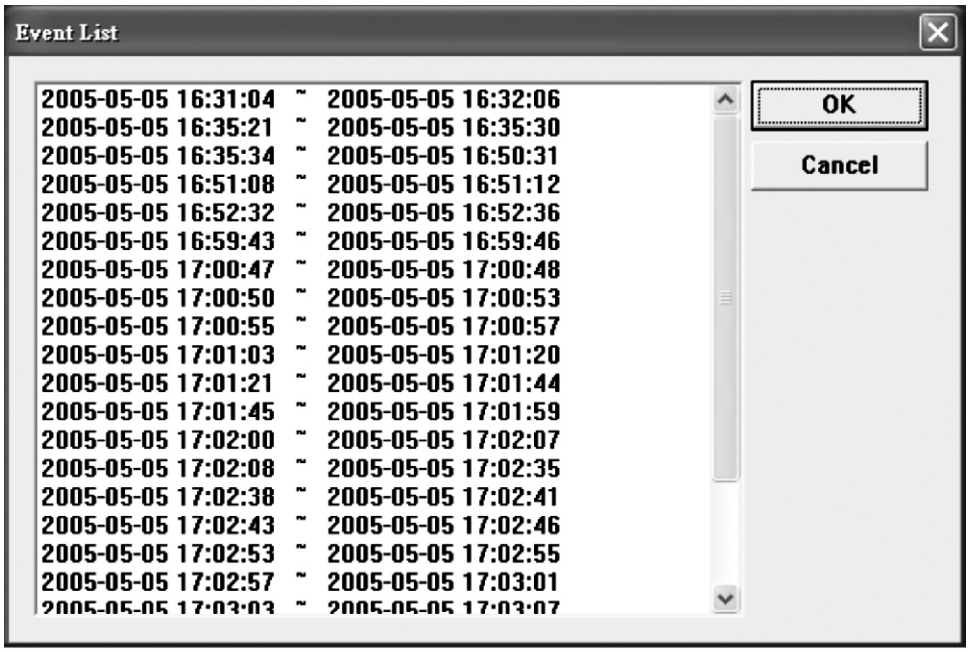
Direct Access



If the stream stored in a DVR HDD is quite long, you may have difficulty to find the exact scene you want to see. When you find a scene you would like to show your friend or report to police officers later, please remember the number in the Direct Access Input edit box, so that you can go there directly by entering the number in the edit box and pressing "GO" button besides it.

Events List Button

You can access the latest 64 events and go to the event directly by this button.



Configure

Options Button

You can change application settings such as MYS file save directory, or default video mode (NTSC/PAL). To change setting, press Options button

Status Button

Show the status on the screen.

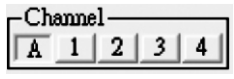
Reset Button

Reset the program.

Playback

Once a DVR HDD is selected, the application automatically displays first screen recorded at the very beginning of it. Then, you can see stream at anywhere within the valid stream reason.

Channel Selection



The default screen display channel setting is ALL CHANNEL, which shows all four channel (if the stream has 4 channel streams) at the same time. If you want to see a channel only or enlarge one channel, press any channel button you want.

HDD Selection

Once the application detects one or more DVR HDDs, it automatically selects the first DVR HDD. You can select any DVR HDD [the DVR HDDs are marked as "VY HDD ". However, you cannot select the normal HDD, which may be Windows–formatted one.

Capturing Button

Screen Capturing

If you want to capture, or backup, current screen, press Capture Current Screen button. Then it will capture the current screen and saves it as BMP file.

Stream Capturing Button

If you wan to capture, or backup, current stream, press Capture Current Stream button.Then it will record the stream you want. It will create .MYS file, whose format is Vineyard Technologies' proprietary stream file format. You can play the recorded file using MYS file player.

Stream Capturing Button

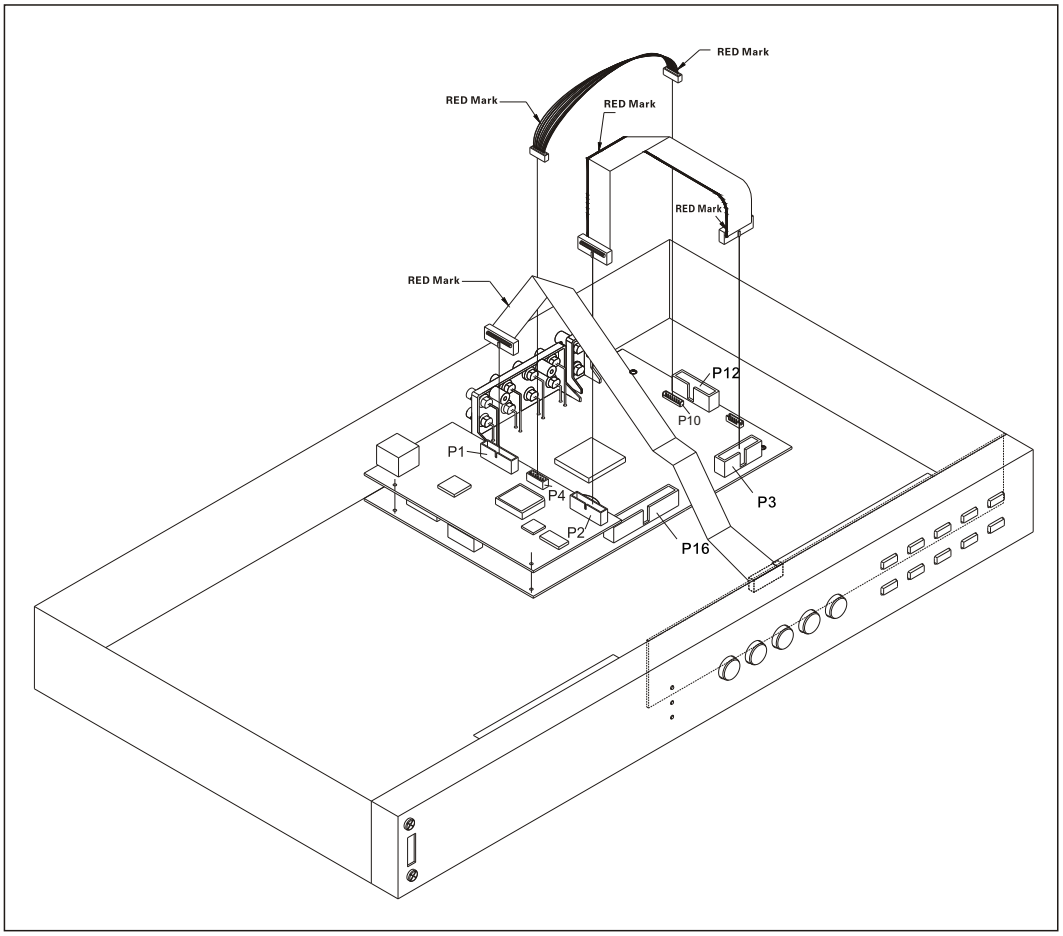
If you wan to capture, or backup, current stream, press Capture Current Stream button. Then it will record the stream you want. It will create .AVI file. You can play the recorded file using any player which support AVI file.

MYS File Player

You can play the recorded MYS file using MYS file player.

13.Video Server Board Installation (Option)

Illustration:



1.Stop the power supply.

2.Remove the cross piece from LAN port.

3.Put the video server board against the LAN port.

4.Fix the board with the screws.

5.Pull out the cable P3 from mother board and slot it in P1 on video server board.

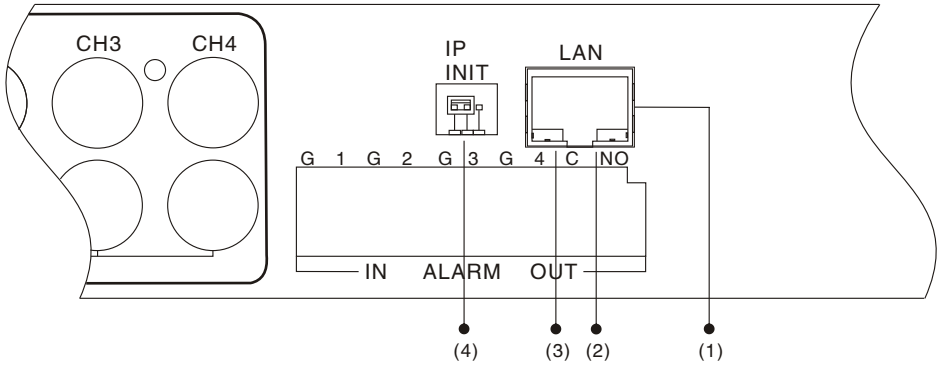
6.Slot one end of IDC–20P cable in P2 on video server board , the other end in P3 on mother board.

7.Slot an other cable one end in P4 on video server board , the other in P10 on mother board.

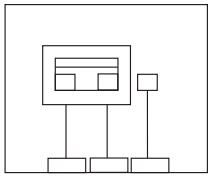
DVR LAN Functional Specification

Network Interface	10/100 Base T，Ethernet
LAN Connector	RJ-45
Protocol	HTTP，TCP/IP，UDP，ICMP，ARP，BPDU
Link Method	ADSL, ISDN, LAN, Internet / Intranet
Remote Control	Live image、playback、set menu、record
Remote Access	Standard Browser : Microsoft IE Browser / Netscape Browser with JAVA Support.

(1)、TCP/IP Port as diagram below :

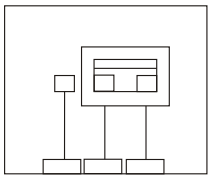


1.Ethernet RJ-45
2.100Mbps/link/Active indicator. (orange)
3.10Mbps/link/Active indicator. (green)
4.IP-INIT SETUP : 192.168.0.100 the default IP for initialization



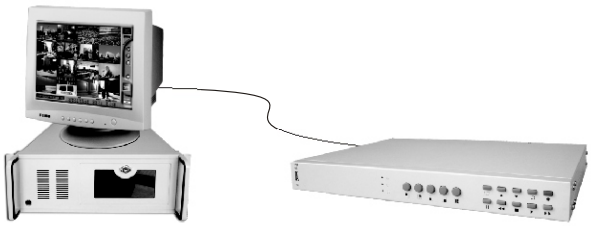
a.As shown jumper is to be on the left

(IP INIT)

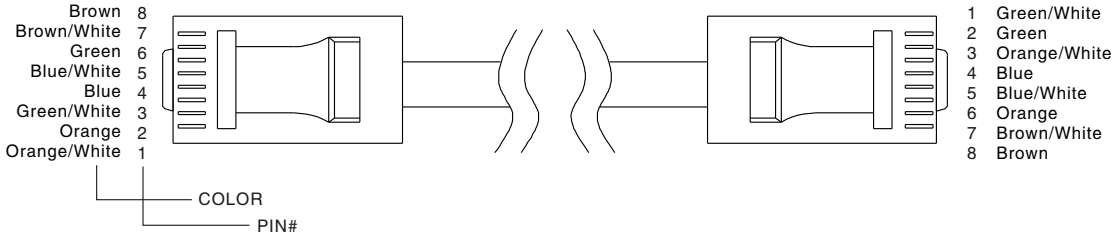


b.How we initialize the IP?
1.Put the jumper to the right.
2.Reboot the DVR.
3.Put the jumper to the left again.

(2)、PC to DVR Setup :



1. Use a cross–over cable to connect DVR and PC.
   Definition of cross–over cable:

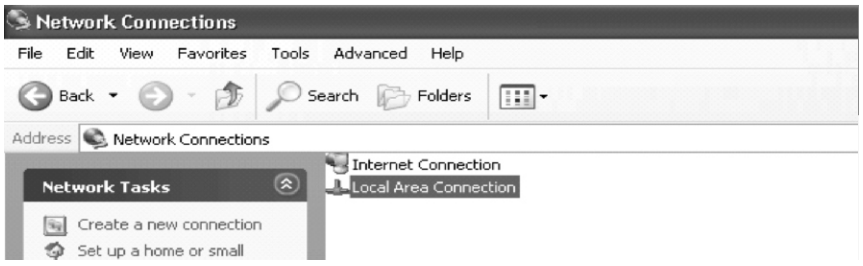


2. Default IP and other parameters.

IP Address:	192 . 168 . 0 . 100
Subnet Mask:	255 . 255 . 255 . 0
Default Gateway:	192 . 168 . 0 . 1
Dns Server:	168 . 95 . 192 . 1
Video Port Number:	4321
Control Port Number:	80
Firmware Version:	Version 1.50

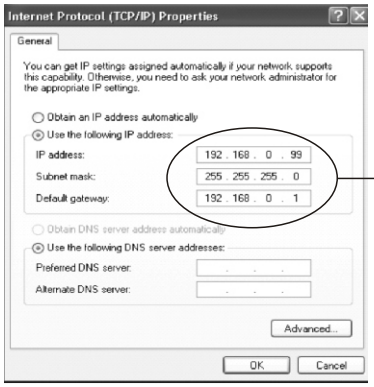
→ Above two items are changed IP Routor or not subject to router parameters.

3. IP AMENDED ON PC SIDE.
   Domain of DVR and PC must be the same. For example of windows 2000/XP:
   ◆ **Network Connections**→**Local Area Connection**, Click the right button to find **Properties**.



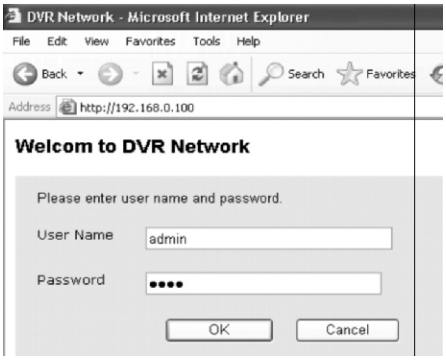
◆Click **Internet Protocol (TCP/IP)** and click **Properties**.

◆Input the IP address ,subnet mask & gateway as below click **OK**.


Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address: 192 . 168 . 0 . 99
Subnet mask: 255 . 255 . 255 . 0
Default gateway: 192 . 168 . 0 . 1
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

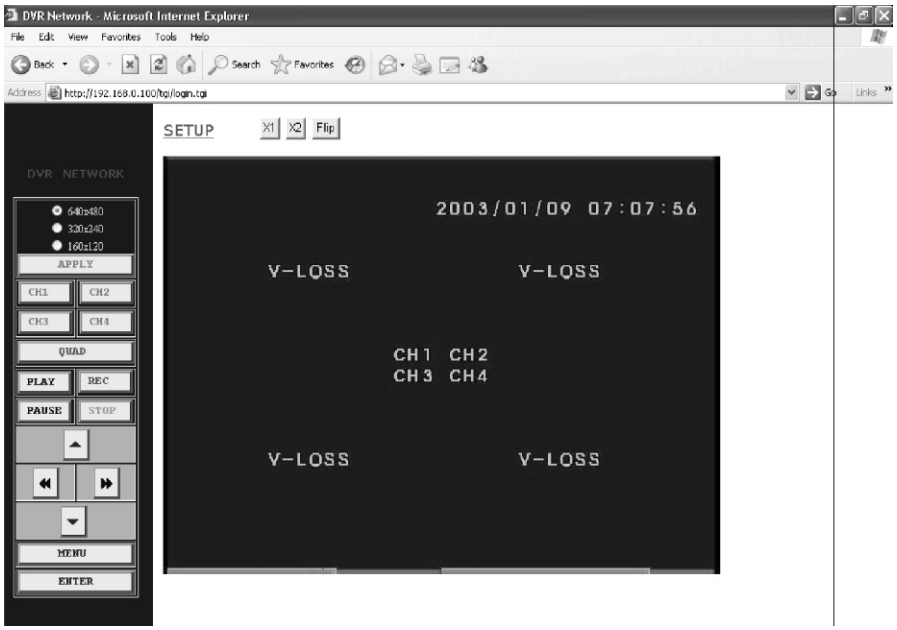
◆Wait until data updated completed.
◆Execute IE browser.
◆Input the following IP address to start connection.
Http://192.168.0.100

Welcome to "DVR Network" comes up hereafter.



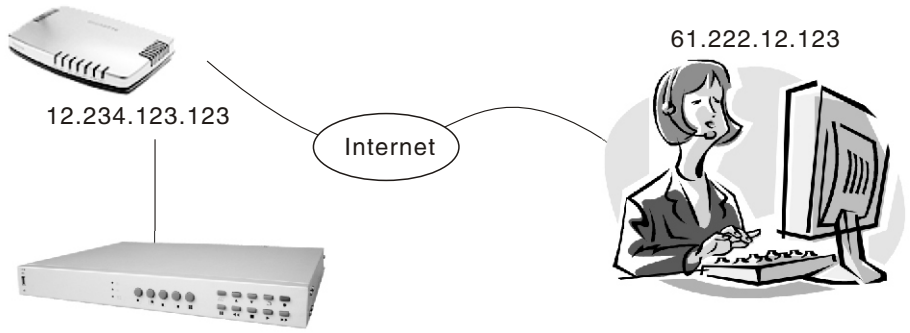
Username：admin
Password ：1234
Click enter fo access remote site.

Remote site picture as follows.

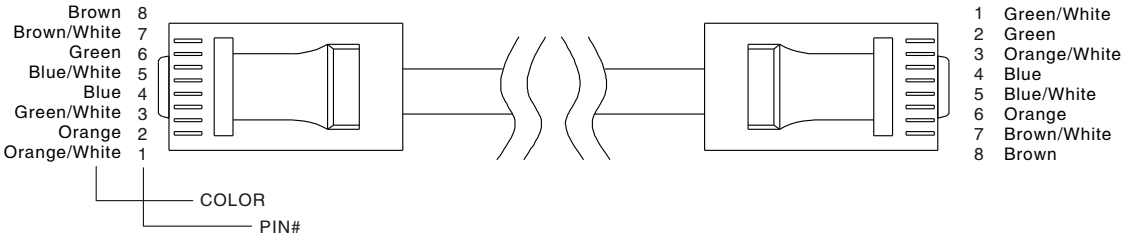


※Download JAVA software if images not found.
Website http://www.java.com

(3)、Setup via ADSL Modem :

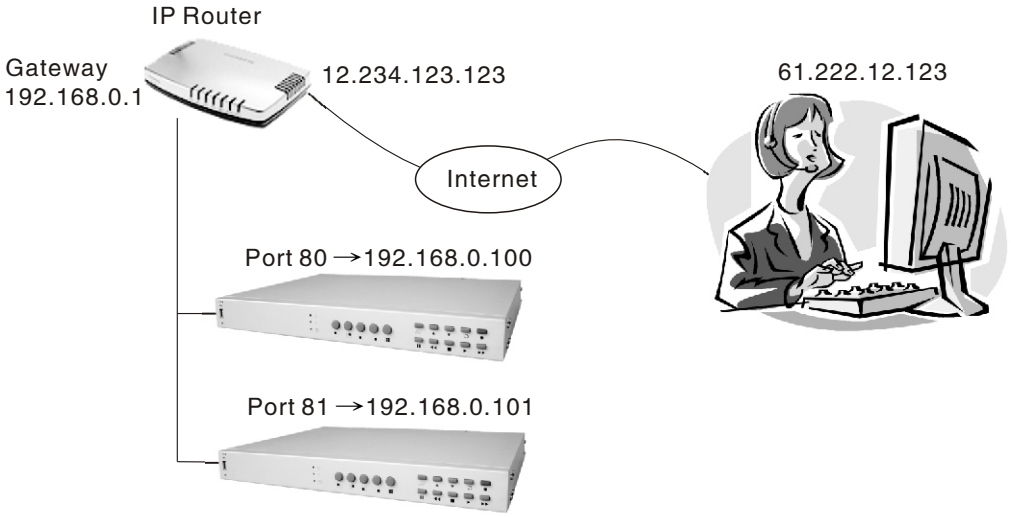


1.Cross over cable in use.
2.definition of cross–over cable：



3.Prior to installation,IP address setup must be well done.

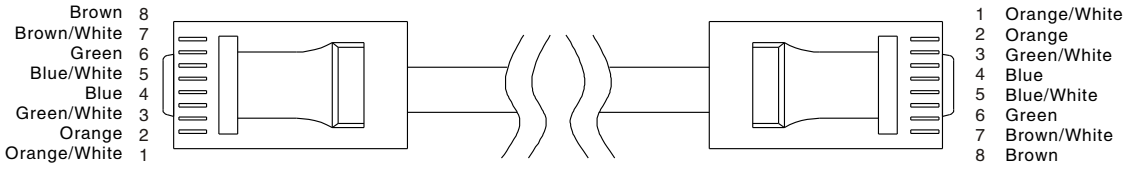
(4)、Connection Via Router or Hub.



◆Setup procedure same as previous description.

◆In use of Router , distributor and Hub.

◆We connect DVR & devices above with the cable as follows:



14. SXGA CARD FOR DVR (Option)

Ⅰ、Feature:

1.SXGA 1280*1024 High Resolution.
2.Supports LCD/CRT/Projector/Plasma TV.
3.Plug & Play free from driver & software.
4.NTSC/PAL jump swappable.
5.On Screen Display (OSD) .

Ⅱ、Specification:

Signal input : digital signal input to DVR.
Signal output : VGA monitor output.
Power input : DC +5V from DVR.
Power consumption : 800mA.

Ⅲ、System Requirement:

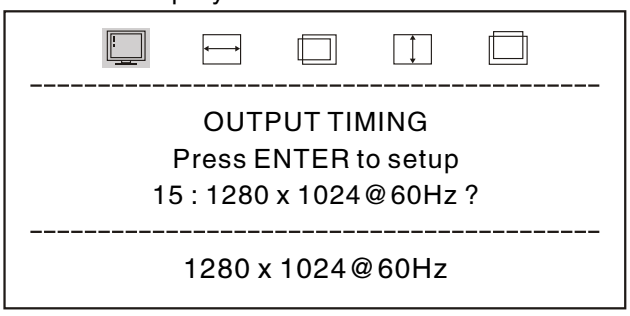
LCD/CRT monitor with VGA input.
Projector with VGA input.

Ⅳ、Guideline on keypad :

1. ▮▮ + ⎕ : entrance of VGA menu setup.
2. ⎕ : exit.
3. ▲ : left/decrease.
4. ▼ : right/increase.
5. ↵ : swap/enter.

Ⅴ、Instruction:

The initial display on VGA monitor



1. OUTPUT TIMING: Resolution and Frequency Adjustment.
2. H ZOOM: Horizontal Zoom.
3. H PHASE: Horizontal Phase.
4. V ZOOM: Vertical Zoom.
5. V PHASE: Vertical Phase.

Press Menu and Pause to enter VGA.
Press to move left and right setup menu.
Press enter to swap decrease and increase feature.Press to decrease and increase.
Press enter again to left and right feature or to confirm setup.
Press Menu to exit VGA setup menu ,for DVR operation.

Ⅵ、Installation:

Procedure:

1.Uncover DVR.
2.Remove the block behind DVR.
3.Remove the connector linking to control board.
4.Unfasten two screws as diagram.
5.Mount two copper bolts on the cabinet bottom.
6.Connect motherboard and VGA board with two cables of 20pin IDC.
7.Insert VGA Card.
8.Fasten VGA connector screws.
9.Fasten VGA Card screws.
10.Plug in connector to VGA Card.
11.Connect to VGA monitor.
12.Test if VGA monitor works.
13.Put the DVR cover on the cabinet if ok.
14.Enter menu to get proper setup.
15.Done